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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,322	01/26/2004	Shinobu Komiyama	H 6216 HST	9432
423 7590 11/13/2007 HENKEL CORPORATION 1001 TROUT BROOK CROSSING ROCKY HILL, CT 06067			EXAMINER GREEN, ANTHONY J	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 11/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/765,322	Applicant(s) KOMIYAMA ET AL.	
	Examiner Anthony J. Green	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 18-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 18-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-12 and 18-28 is acknowledged. The previous Examiner required an Election of Species however the current examiner has determined that a species election is not necessary and therefore the election of species requirement has been withdrawn.
2. Applicant requests that claims 13-17 and 29-33 be canceled however it should be noted that 37 CFR 1.121 requires that each amendment document that includes a change to an existing claim, cancellation of a claim or submission of a new claim **must include a complete listing** of all claims in the application. The cancellation of these claims is noted by the examiner, however applicant should make sure that this change is correctly reflected when responding to the instant office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Leah et al (US Patent No. 4,227,932 A).

The reference teaches, in the claims, a potassium silicate cement composition comprising potassium silicate having an $\text{SiO}_2/\text{K}_2\text{O}$ ratio within the range of about 1.8 to

2.5 of SiO_2 to 1 of K_2O , water, a hardener, at least one acid resistant inorganic filler, such as clay or silica sand, at least one surfactant and at least one coating oil.

The instant claims are met by the reference as the reference teaches a composition that encompasses that which is instantly claimed.

Claims 1-2, 4, 6, 18, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsui et al (US Patent No. 4,169,916 A).

The reference teaches, in example 1 and the claims, a composition comprising water, a water soluble or water dispersible lithium silicate at a concentration of 2 to 250 g/l which lithium silicate is a mixture of silicic acid or silicate and lithium salt in a molar ratio of 20:1 to 1:1, at least one water soluble or water dispersible saturated or unsaturated fatty acid compound (such as a stearate (claim 7) , higher alcohol wax, polyethylene type resin or silicate type resin at a concentration of 1 to 250 g/l. See especially example 1 which recites that the amount of lithium silicate is 150 g/l, sodium stearate is 7 g/l and the surfactant is present in the amount of 3 g/l.

The instant claims are met by the reference as the reference teaches a composition that encompasses that which is instantly claimed.

5. Claims 1-4, 7, 9, 18-20, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Laut et al (US patent No. 4,403,059A).

The reference teaches, in the examples and the claims, an adhesive composition based upon an aqueous solution of alkali metal silicate with a content of powdered

inorganic filler, having good storage stability, which comprises an aqueous alkali metal silicate solution containing: (a) from 10% to 40% by weight of at least one powdered inorganic filler, (b) a suspension effective amount of at least one zinc soap of a fatty acid having from 12 to 22 carbon atoms and (c) from 0 to about 24% by weight of a 50% by weight stable, aqueous dispersion of an alkali-resistant organic polymer, based on the weight of the total composition. Claim 3 recites that the zinc soap is present in an amount of from about 1% to 5% by weight, based on the total composition. Claim 5 recites that said zinc soap is zinc stearate. Claim 8 recites that the alkali metal silicate solution is selected from the group consisting of (a) sodium silicate solution having a weight ratio of 3.3 to 3.9:1 for $\text{SiO}_2/\text{Na}_2\text{O}$ and a solids content of from 28% to 38% by weight, (b) potassium silicate solution having a weight ratio of 2 to 2.6:1 for $\text{SiO}_2/\text{K}_2\text{O}$ and a solids content of from 29% to 40% by weight, and (c) mixtures thereof and claim 12 recites that the alkali-resistant organic polymer is present in an amount of from 5% to 24% by weight and is based on acrylate polymers, styrene/acrylate polymers or styrene/butadiene polymers.

The instant claims are met by the reference as the reference teaches compositions that encompass that which is instantly claimed.

6. Claims 1, 3-5, 9, 11, 18-21, 25, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Rupe et al (US Patent NO. 4,116,851 A).

An alkaline, aqueous, liquid composition having a pH of from about 9 to about 13, consisting essentially of:

- (a) from about 1/4% to about 20% of a clay thickening and corrosion protection agent selected from the group consisting of smectite and attapulgite clays and mixtures thereof,
- (b) from about 1/2% to about 9% of an alkali metal silicate having an $\text{SiO}_2 : \text{M}_2\text{O}$ ratio greater than about 1, preferably greater than about 2 (claim 6) wherein M is selected from the group consisting of sodium and potassium,
- (c) from about 1/4% to about 20% of a safety, dispensing, and/or cleaning improver selected from the group consisting of water-insoluble mineral oil compounds containing carbon chains in excess of about 20 carbon atoms and having a specific gravity of at least about 0.82, water-insoluble saturated fatty acid esters containing from about 13 to about 22 carbon atoms, water-insoluble dialkyl ethers wherein each alkyl contains from 1 to about 13 carbon atoms and the total carbon atoms is from about 7 to about 14, and mixtures thereof having a freezing point below about 15.degree. C. and a vapor point above about 100.degree. C.
- (d) a hypohalite liberating bleach component selected from the group consisting of alkali metal and alkaline earth metal hypochlorites and hypobromites, brominated trisodium phosphate, chlorinated trisodium phosphate, heterocyclic N-bromo and N-chloro imides and mixtures thereof,

- (e) from 0% to about 10% of a bleach stable surfactant selected from the group consisting of alkyl sulfate salts containing from about 8 to about 18 carbon atoms in the alkyl group and water-soluble betaine surfactants
- (f) from 0% to about 15% of detergency improvers selected from the group consisting of alkali metal carbonates, polyphosphonates, polycarboxylates, phosphates and mixtures thereof,
- (g) from 0% to about 10% methylene chloride, and
- (h) from 0% to about 60% of an abrasive selected from the group consisting of quartz, pumice, pumicite, titanium dioxide, silica sand, calcium carbonate, zirconium silicate, diatomaceous earth, whiting, feldspar and mixtures thereof, said abrasive having particle size diameters of from about 1 to about 250 microns and specific gravities of from about 0.5 to about 5.0, and
- (i) the remainder water, said composition having a viscosity of from about 100 CPS to about 1,000,000 CPS.

The instant claims are met by the reference as the reference teaches compositions that encompass that which are instantly claimed.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leah et al (US Patent No. 4,227,932 A).

The reference was discussed previously. Further the reference teaches, in column 5, lines 24-31, that the surfactant may be selected from anionic, cationic or nonionic materials. Further the filler may be selected from carbon.

The instant claims are obvious over the reference. While the reference does not recite the presence of a soap such as a stearate, since it is well known in the art that various stearate soaps are useful as anionic surfactants, their addition to the composition is obvious absent evidence showing otherwise. As for claim 12 it is believed that the references disclosure of the use of carbon meets the addition of the solid lubricant as graphite is a type of carbon and graphite is taught by applicant in the specification as an example of a solid lubricant.

9. Claims 7, 9-10, 19, 23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsui et al (US Patent No. 4,169,916 A).

The reference was discussed previously. Further the reference teaches, in column 3, lines 55+, that water soluble organic high polymers or surface active agents may be added to the solution.

The instant claims are obvious over the reference. As for claims 7 and 23 while the reference does not specifically recite the use of these stearates, the reference does

broadly state that stearates may be added and therefore it would have been obvious to use any type of stearate without producing any unexpected results absent evidence showing otherwise. As for claims 9, 19 and 25 the reference teaches in column 3, lines 55+ that various water soluble organic high polymers may be added and therefore these claims are rendered obvious by the reference. As for the specific types of organic high polymers it would have been obvious to utilize any types of water soluble organic high polymers absent evidence showing otherwise thus rendering obvious claims 10 and 26.

10. Claims 1-2, 4, 8, 18, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seymour et al (US Patent No. 5,358,554A).

The reference teaches, in the claims, a liquid composition comprising an aqueous solution of finely divided paraffin wax, and alkali metal silicate. Column 2, lines 24+, the types of alkali metal silicates including sodium or potassium and that the preferred is one having a ratio of silica to sodium of between 0.5 and 3.5.

The instant claims are obvious over the reference. As for the amounts of the components and the molar ratio of the alkali metal silicate, while the reference does not recite the same amounts or molar ratio it does recite amounts and a range of molar ratios that encompass (overlap) those instantly claimed. One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to

select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

11. Claims 10-12 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laut et al (US patent No. 4,403,059A).

The reference was discussed previously.

The instant claims are obvious over the reference. With respect to claims 10 and 26 while the reference does not recite the use of the same organic polymer based thickener it does teach the use of polyacrylate polymers and accordingly it would have been obvious to use any type of polyacrylate material such as sodium polyacrylate without producing any unexpected results absent evidence showing otherwise. As for claims 11-12 and 27-28 while the reference does not specifically teach examples wherein mixtures of fillers may be used it does teach that mixtures of fillers may be used which include quartz powder and mica and accordingly it would have been obvious to incorporate these materials into the composition thus rendering obvious claims 11-12 and 27-28.

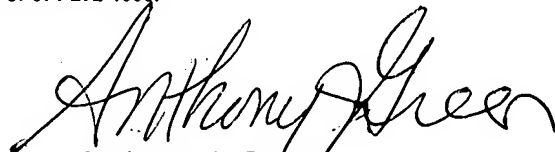
Information Disclosure Statement

12. The references that were not initialed were not considered by the examiner as these references fail to comply with 37 CFR 1.98(a)(3) because a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language has not been presented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Anthony J. Green
Primary Examiner
Art Unit 1793

ajg
November 7, 2007